

APP STORE MANAGEMENT

Business problems addressed by the App Store Management Database:

1. This App store will solve the problem of disorganized user application catalogue using the entity profile by which users can have multiple profiles through which all the apps will be segregated based on the user's various purposes.
2. App store management also implements common rules and regulations for the Developers for creating and releasing applications via License entity which will address the issue of unlawful and illegal application developments.
3. Since users can have multiple profiles, App store database management can impose data restrictions to a certain profile to manage App accessibility.

Entities:

1. App
2. Developer
3. Application Category
4. License
5. Terms_and_Conditions
6. Reviews
7. Profile
8. User Information
9. Subscription
10. Card Details
11. User_App_Catalogue
12. Advertisements

Business Rules for Entities:

In App Store Management ER diagram, an App must have to be developed by a developer working in an organization and conversely a developer may develop a group of application or may not at all. Developer who is responsible for developing apps must agree on the licensing documentation of the app store in order to proceed with the release of their application.

- **License:**

App Store Management implements Licensing documentation for all the developers from different organizations who are part of this App Store for developing apps. License acts as an agreement between the government and organizations responsible for developing applications. Every developer must agree upon the license.

- **APP:**

App entity type is the main entity of App Store Management as it deals with the actual user requirements that the developer wants to address and according meet end-user requirements. App entity type has mandatory many to mandatory one relationship with “Application Category” entity type i.e., an app comes under only one application category and an application category must have one or many apps.

- **Advertisement:**

Third Party Advertisement organizations can post their product’s advertisements in the Apps by collaborating through Developers.

- **Terms and Conditions:**

Terms and Conditions are common contractual rights and obligations that application developer has imposed on all the end users. Terms_and_Conditions is an associative entity between Profile and App entity types. Hence an application imposes one to many terms and conditions on each profile user that installs the application, and each profile has to agree to these terms and conditions.

- **User:**

User entity type is the end user who is going to use the application on any device such as mobile phones, laptops, tablets etc. User entity type can have one to many profiles on the App Store and conversely one or many profile can be created by one user. User can maintain multiple profiles based on their requirements and their use cases like suppose a parent is having a profile on the App Store and they have a different profile created for their children to make sure their children can only have access to the applications according to the age rating.

- **Profile:**

Profile is a virtual avatar which can be created by the user. It includes information such as platform info (device details), creation details, modification details, payment info and subscription details. All of the activities in App Store Management is around Profile entity type. A user profile can write a review about an application that he/she has installed i.e., each profile may or may not write a review about the application and a review on any application cannot exist without a profile.

- **Subscription:**

In app purchases for end users. App provides subscription to their services. Users via their Profiles may or may not subscribe to these services.

- **Card Details:**

Profile may or may not maintain user payment/Card details. Card Detail entity type includes payment information of a user to make payments to the subscriptions offered by any application on the App Store.

- **User App Catalogue:**

It tracks all the application details that a profile has installed on the App store.

ER DIAGRAM -

